# **Denton County Transportation Authority**



Rail System Safety Program Plan (SSPP)

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# DENTON COUNTY TRANSPORTATION AUTHORITY RAIL SYSTEM SAFETY PLAN

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#### I. POLICY STATEMENT

The Denton County Transportation Authority (DCTA) is a coordinated county transportation authority created by House Bill 3323, under Chapter 460 of the Texas Transportation Code, approved by the 77th Texas Legislature and signed into law by the Governor in 2001. On November 5, 2002, the voters in Denton County approved the confirmation of DCTA by 73%. With that authorization, the citizens adopted the Authority's Service Plan that detailed the new transit entity's future priorities to enhance mobility, provide transportation alternatives and develop solutions to growing congestion and air quality issues. These service priorities included three layers of bus service, a university shuttle system and a regional rail system known as the A-train.

The DCTA is governed by a 14-member Board of Directors appointed by respective entities. Large cities, small cities and at-large members serve two-year terms. In accordance with DCTA by-laws, the Board adopts the annual operating budget and is responsible for setting policy. The President oversees the day-to-day operations of the DCTA and implements policies set forth by the Board.

DCTA has constructed a regional passenger rail line to serve Denton County residents and visitors. The rail route, which was approved by the DCTA Board of Directors in May 2005, after extensive study and public input, generally follows along the east side of I-35E. The rail line is approximately 21 miles long from Denton to Carrollton. Five stations are built in Denton County to serve passengers. Service in June 2011. The completion of the rail line opened simultaneously with Dallas Area Rapid Transit's completion of its Green Line to Carrollton. This will allow passengers on the A-train to transfer to light rail or bus, at a transfer station located at Trinity Mills Road in Carrollton, and to continue travel to downtown Dallas or other transit points in the North Texas region.

Safety is the primary focus at every level of DCTA's activities, including: planning, design, construction, testing, operations and maintenance. Towards fulfilling this commitment and responsibility to safety, DCTA has developed this Rail System Safety Program Plan that encompasses safety related aspects of the design, acquisition, construction, installation and testing, and subsequent operations and maintenance of the rail system. Responsibility for implementation of this plan is assigned to the DCTA's Manager of Transit Operations. All personnel involved in the construction, operations and maintenance of the rail system are trained in, and subject to the provisions of the rules, policies and procedures specified in this SSPP and are directed to comply with the provisions set forth in this document in order to achieve DCTA's goals for a safe commuter rail system.

Danny-Bailey, AVP Rail Operation, DCTA	4 Jun 19 Date
Raymond Suarez, Chief Operating Officer, DCTA	 Date

#### 1. AUTHORITY

DCTA's AVP Rail Operations Operations has responsibility for oversight and management of the Operations & Maintenance (O&M) contract.

All DCTA and contractor personnel are charged with the responsibility and authority to take the necessary actions, within the scope of their knowledge and training, to ensure the immediate safety of passengers, employees, property and the general public that come in contact with the system. If an employee detects an unsafe act or condition that poses an immediate compromise to safety, he/she is empowered to stop the act or condition consistent with his/her training and report the act or condition to his/her supervisor or other appropriate Authority.

The O & M contractor, First Transit will be responsible for assisting DCTA with drafting updates to the SSPP.

#### 2. PURPOSE

DCTA and its employees and contractors are governed by the policies and procedures set forth in this SSPP in the safe and efficient discharge of their duties. The SSPP requires that all safety responsibilities and tasks are assigned, tracked, and documented in a useful manner.

System Safety is defined as the coordinated effort of all DCTA, the O & M contractor, First Transit and other contract employees under the direction and guidance of the Manager of Transit Operations or his designated representative, to prevent, control, or mitigate accidents, injuries, and incidents to the lowest level possible through the most cost-effective use of available resources. It applies to all activities that involve the design, construction, testing, operations, and maintenance of the commuter rail system. It includes assigning the responsibilities for interacting with relevant federal, state, and local agencies, and complying with all applicable regulations and standards

#### 3. GOALS

Goals will be reached through consistent application of the SSPP policies and procedures. Goals for the DCTA system include:

- Instilling throughout the DCTA organization (staff and contractors), a safety culture in which safety is a primary and integral consideration in all immediate daily activities as well as in long-range tasks.
- Meeting or exceeding all relevant federal, state, local, and industry safety regulations, and practices.
- Maintaining a high level of safety comparable to or exceeding other U.S commuter rail operations, using available FRA safety data.
- Identifying, eliminating, minimizing and/or controlling all safety hazards.

#### 4. OBJECTIVES

By setting objectives, and through the development, publication and compliance with organizational policies and procedures, the goals of the SSPP can be achieved. The following objectives are essential to the fulfillment of the SSPP:

- Training and Education: Documentation that all employees and contractors are sufficiently trained before starting their duties to ensure that they have the necessary knowledge, skills, and abilities to perform their duties safely and effectively. Instruction should include training in the organization's hazard identification/resolution process, embodied in the philosophy of "Inspect—Detect—Correct."
- Responsibility and Accountability: Documentation that all employees are
  instructed in and have acknowledged their obligation and authority to
  identify hazards and initiate action to stop or control them through the
  established procedures in which they have been trained.
- Review and Evaluation: Through constant attention to detail and through scheduled as well as unannounced inspections and audits, the DCTA's policies and procedures, and ultimately the SSPP, will remain current and effective.

#### 5. SYSTEM DESCRIPTION/ORGANIZATIONAL STRUCTURE

DCTA rail service opened in June 2011. Since September 2012, DCTA has operated 11 Stadler GTW DMUs.

#### 5.1 System Description

The rail line is approximately 21 miles long from Denton to Carrollton. Five stations will be built in Denton County to serve passengers. The completion of the rail line opened simultaneously with Dallas Area Rapid Transit's (DART) completion of its Green Line to Carrollton. This will allow passengers on the A-train to transfer to light rail or bus, at a transfer station located at Trinity Mills Road in Carrollton.

**Maintenance-of-Way**: DCTA contracts maintenance of the rights of way on the DCTA System between Denton and Carrollton. Mainline track and CTC sidings are maintained to FRA Track Class 4 standards. The O & M contractor, First Transit is responsible for assisting DCTA and the freight provider in clearing derailments on the track it maintains.

- Signal System and Grade Crossing Maintenance is performed under contract by the O & M contractor, First Transit in compliance with applicable FRA, TxDOT, and AREMA recommended practices.
- Right-Of-Way Maintenance is performed under contract with the O & M contractor, First Transit in compliance with applicable FRA, TxDOT, and AREMA recommended practices.

#### 5.2 Rail Corridor Operations

Weekday service is provided between the hours of 4:30 AM to 10 PM. Weekend service is provided from 7am to 12am. All rolling stock is maintained at the Operations

and Maintenance Facility (OMF) in Lewisville. Freight Operations on this line are only between 12 AM and 5 AM and are operated by Dallas, Garland and Northeastern (DGNO) Railroad.

# 5.3 Responsibilities/Organization Structure

To manage System Safety on a continuous basis, the First Transits General Manager is responsible for the coordination of safety rules and procedures system-wide.

Department managers have the responsibility for accident prevention and the identification and correction of hazards in their specific areas of responsibility. In instances where corrective action extends beyond the resources or authority of the manager involved, timely communications and documentation will be made through the chain of command to the General Manager.

# 5.4 Relationship and Authority of Safety Department

To manage System Safety on a continuous basis, the First Transits General Manager has designated the responsibility for the coordination of safety rules and procedures system-wide to First Transits Deputy General Manager. Department Managers are responsible for ensuring that all projects, products, and services offered by DCTA are in compliance with the Federal, State, County, and Local Regulations.

# 5.5 Legislative Requirements for Safety and Security

The system can not be operated and maintained to the highest standards of safety without the cooperation of a variety of federal, state and local agencies. Communication with these agencies is fostered through:

- DCTA community outreach
- The Public Safety Subcommittee of the Safety Review Committee
- Periodic meetings with FRA, TSA and TxDOT staff
- The Emergency Preparedness Plan and other programs with a community involvement aspect

The First Transits Safety Department is responsible for ensuring that proper training and orientation to facilities, right-of-way and vehicles is provided to all outside agency personnel as appropriate.

# 5.6 Safety Plan and Policy Dissemination

Control of the SSPP is vested in the AVP Rail Operations. Current members of the Safety Committee will also hold copies of the SSPP, and will have the responsibility of providing information contained in the plan to staff members and contractors that may require this information.

# 6. SYSTEM SAFETY PROGRAM CONTROL AND UDPATE

The SSPP is a controlled document and, as such, it is necessary to ensure that all who hold copies have the most current version and/or access to current revisions.

Revisions and updates will be issued as appropriate and will supersede previous editions.

#### 6.1 Strategic Safety Program Planning

The Safety Committee will lead an ongoing strategic planning process dedicated to improving the SSPP and providing a periodic review of the organization's resources with respect to its adequacy for addressing the operational risks and hazards of the system.

#### 6.2 Administrative Controls

Input and feedback from all employees, passengers, and emergency response agencies will influence the direction and content of this SSPP. Feedback is not only welcomed, but encouraged. The System Safety Committee (detailed below) meets at least bi-annually during revenue service to review the SSPP, and shall consider input and feedback from all appropriate areas. Revisions recommended to the AVP Rail Operations shall be limited to policies, procedures and activities specified by this SSPP. Prior to revenue service, the System Safety Committee will meet as needed to review safety issues requiring attention.

As mentioned above, control of the SSPP is vested in the DCTA AVP Rail Operations to whom the O & M contractor, First Transit will provide assistance with annual revisions in order to help ensure the ongoing safety of DCTA operations and facilities.

The System Safety Committee will be comprised of the following personnel or their designee:

- AVP Rail Operations, DCTA
- Director of Railway Systems, DCTA
- Manager of Rail Operations, DCTA
- General Manager, First Transit
- Deputy General Manager, First Transit
- Equipment Maintenance Manager, First Transit
- Transportation Manager, First Transit

#### 6.3 Interdepartmental Coordination

Successful implementation of a SSPP requires a coordination of effort between different departments within the organization in order to manage the tasks and activities detailed in the plan. Members of the Safety Committee will be responsible for providing the resources in their respective departments needed to ensure that the SSPP is successfully implemented and continues to evolve with the organization over time.

#### 6.4 Interagency Coordination

The O & M contractor, First Transit will be contractually obligated to coordinate with outside entities involved in the DCTA System. Oversight of the interagency coordination is the responsibility of the DCTA Manager of Rail Operations. A list of these entities is contained in Appendix A.

# 7. SAFETY CONTRACT REQUIREMENTS

#### 7.1 Contracting For Services

DCTA will ensure that any contracted services that may have an impact on system safety will be performed in accordance with the recommended safety criteria developed for this System. Contract provisions for such services will require the contractor to incorporate and document the proposed application of recommended safety elements within the scope of its contract submittals.

# 7.2 Contracting For Facilities, Equipment, Maintenance

The contractor's responsibility for procuring specific supplies is detailed in the Scheduled Maintenance Manual(s) provided to DCTA by the design consultant. The contractor is prohibited from using substitute material to perform maintenance or repairs to the vehicles or facilities without authorization from DCTA. In the event the contractor proposes to use substitute material to perform maintenance or repairs to the vehicles or facilities, following a written proposal, a complete survey of the physical properties of the proposed material will be performed by a qualified engineer. In the case where a warranty of DCTA owned equipment may be affected, approval of the firm or firms with which the warranty agreement exists must be obtained to the satisfaction of DCTA. In the case where no warranty of any DCTA owned equipment may be affected, a complete survey of the physical properties of the proposed material will be performed by a qualified engineer to the satisfaction of DCTA. If, based on the above required level of review, DCTA is satisfied with the material the contractor has proposed, a written addendum to the operating agreement will be prepared.

#### 7.3 Construction Management

All construction contractors working for DCTA must comply with relevant state, local, and federal regulations. In addition, these contractors must also comply with relevant DCTA procedures including track access and right-of-way safety procedures. Contract provisions for construction work will mandate compliance to these requirements and require the necessary training and qualifications of personnel to ensure that these standards are understood and effectively implemented. Major contractors will be required to submit a Construction Safety Manual that documents the scope of the Contractor's safety program and the means by which all safety requirements will be achieved. On-site qualified safety personnel will be required during construction. DCTA or its representatives will monitor contractor safety performance during the course of construction for compliance with the safety program.

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#### 8. FACILITIES MAINTENANCE AND INSPECTION

Building and mechanical facilities throughout the yard will be inspected monthly by the O & M contractor, First Transit for safety (blue light protection, employee personal protective equipment, fire extinguishers, first aid equipment, facility lighting, etc.) and housekeeping (yard and building free form debris, floor free from hazards, chemicals properly identified and stored, clear employee washrooms and locker rooms, material handling and waste, etc.). Written reports will be prepared following such inspections and submitted to DCTA for follow-up.

#### 9. VEHICLE MAINTENANCE, INSPECTION/REPAIR

Comprehensive rail equipment maintenance schedules and procedures will be detailed in the Operation and Maintenance Plan prior to revenue service. The Operation and Maintenance Plan, work sheets and records of maintenance activities will be available for review at the Operations and Maintenance Facility.

Tools and equipment, particularly power tools and equipment involved in lifting and jacking will be inspected periodically to determine they are safe for use. Any detected safety hazards will be corrected or equipment replaced if deemed necessary. Tools and equipment considered unsafe will be tagged accordingly until released for use after corrections, repair, test or inspection by qualified personnel. In the case of equipment not owned by the O & M contractor, First Transit, notification must be given to DCTA's Manager of Rail Operations for determination on repair or replacement. Inventory of tools and inspection checklists are filed in the office of the O & M contractor, First Transit's Mechanical Manager.

#### 10. RULES/PROCEDURES REVIEW

The O & M contractor, First Transit has representation on the General Code of Operating Rules Committee and issues system general orders for applicable rules revisions. First Transit also issues Transportation Notices, Train Operation Notices and Mechanical Notices for revisions that are specific to the O & M contractor, First Transit's rules and procedures. All employees of the O & M contractor, First Transit are periodically counseled and tested on updated rules, procedures and policies pertaining to their respected responsibilities.

#### 11. TRAINING

Each DCTA or O & M contractor, First Transit employee engaged in the operation and maintenance of the commuter rail system will be required to attend and pass training programs appropriate to his or her responsibilities and position as required by their respective safety organization. Each safety organization within the O & M contractor, First Transit and DCTA is responsible for ensuring that proper system training of its personnel is accomplished in a timely manner and that proper records are kept of training programs and attendance. A System Safety Program for individual employees will be integrated into regular employee training. Special safety training sessions will be held to ensure that matters related to safety, particularly new rules or procedures, are fully explained and understood. Worksheets and examination results are available from the O & M contractor, First Transit's respective department managers at DCTA's Operations and Maintenance Facility, Lewisville, Texas.

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# 12. EMERGENCY PLANNING AND RESPONSE

#### 12.1Purpose

DCTA has developed policies and procedures for responding to railroad emergencies. These procedures are detailed in the O & M contractor, First Transit's Employee Handbook, which can be referenced at the Operations and Maintenance Facility, Lewisville. All employees are trained, tested, and periodically re-instructed in these procedures. These procedures are intended to enhance crew readiness and provide direction for promptly and properly responding to emergencies and service disruptions on the commuter rail system. Additionally, First Transit has developed training programs for all on-line emergency responders. The O & M contractor, First Transit will conduct full-scale emergency simulations/drills at least once every 2 year(s) to assess the ability of all participants to respond to an emergency situation in accordance with the Emergency Preparedness Plan. Emergency response agencies will be included in these drills.

#### 12.2 Reference Documents

- 49 CFR Part 239, Passenger Train Emergency Preparedness
- DCTA Emergency Preparedness Plan
- Contractor Employee Handbook

The DCTA Emergency Preparedness Plan sets forth the policies and procedures developed in accordance with 49 CFR Part 239 to organize and prioritize the activities necessary to achieve an effective response to an emergency. The DCTA Emergency Preparedness Plan will be available for reference at the Operations and Maintenance Facility located in Lewisville, Texas. The Emergency Prepardness Plan and all updates will be submitted to FRA for review and approval.

# 13. WORKPLACE SAFETY PROGRAM

#### 13.1 Employee Safety Programs

All departments of DCTA, First Transit, and DGNO have Safety Instructions that govern employee's activities and responsibilities. At a minimum, monthly departmental safety meetings are conducted which include the designated supervisor and his or her employees. These meeting are specifically designed to encourage employee participation and input on safety issues and concerns.

# 13.2 Contractor Safety Coordination

All contractor'e employees must attend a DCTA approved Contractor's Orientation Class prior to working within 25 feet of DCTA's operating tracks and are required by contract to have a Roadway Worker qualified roadway worker in charge (RWIC) of the workgroup. These RWIC's are trained on all aspects of railroad protection procedures furnished to DCTA contractors by the O & M contractor, First Transit. DCTA's Manager of Rail Operations, is responsible for ensuring compliance with all roadway worker activities on DCTA's property.

#### 13.3 Fitness for Duty Programs,

#### 13.3.1 Drug and Alcohol Program

Railroad operations on the general railroad system of transportation are regulated by the Federal Railroad Administration (FRA) and Department of Transportation (DOT) under 49 CFR Part 219 (FRA Drug and Alcohol Program) and Part 40 (DOT Drug and Alcohol Program) to control/prohibit the use of alcohol and/or drugs by railroad employees performing covered service. DCTA's First Transit has a company policy prohibiting the use of drugs and alcohol by on-duty employees and also has an FRA-approved Random Drug and Alcohol Program applicable to all employees subject to the Hours of Service Law. This Program specifies the method of selection for employees to be tested, drugs to be tested for, frequency for testing, safeguards for testing and the consequences for positive test results.

Supervisory personnel have been trained in the Signs and Symptoms of drug/alcohol use/abuse and are qualified to make reasonable suspicion determinations with regard to testing.

First Transit's Transportation Manager retains all drug/alcohol testing records and will be the Random Testing Program Manager.

#### 13.3.2 Fatigue Program

The O & M contractor, First Transit will provide fatigue awareness training to all new employees that include strategies for managing fatigue and for obtaining medical evaluations when indicated.

#### 13.3.3 Medical Monitoring Program

All covered service employees receive a pre-employment physical examination that includes hearing and vision testing to ensure that they are medically fit to perform their assigned duties. Operators and attendents are required every three years to have a recertification physical which includes a hearing and vision test and are also required to report if their hearing or vision has deteriorated to the extent that the person no longer meets the standards required in 49 CFR part 240.121 (Criteria for Vision and Hearing Acutity Data) and 49 CFR Part 242.117 (Vision and Hearing Acuity). Care is taken to ensure privacy and HIPPA requirements are not violated.

#### 14. PASSENGER AND PUBLIC SAFETY PROGAMS

A passenger and public safety outreach program containing the following elements will be developed for the DCTA System:

- Operation Lifesaver: DCTA or the First Transit shall conduct Operation Lifesaver awareness training programs using certified Operation Lifesaver presenters. Awareness training programs are conducted at area schools, religious institutions, community organizations and meetings. This will be an ongoing effort of the railroad.
- Transit Watch Safety and Security: DCTA will initiate a Transit Watch program to raise public awareness on safety and security issues. Information is posted on the official DCTA Web site.

 DCTA will also use passenger awareness pamphlets for on board safety and evacuation procedures. In accordance with 49 CFR Part 239 (Passenger Train Emergency Preparedness) requirements, DCTA also will run on-board announcements to inform passengers of both on-board emergency procedures and security awareness.

# 15. RAIL CORRIDOR OPERATIONAL SAFETY

#### 15.1 Joint Freight Operations

During revenue service freight movement on DCTA's rail corridor will occur in a temporally separated manner. Freight and passenger service will not occur simultaneously. Freight movements will occur only after passenger trains are returned to the yard at the Operations and Maintenance Facility at the end of the service day and will be removed from the alignment prior to passenger vehicles leaving the yard for morning service.

DART owns the rail line that is used for DCTA's commuter service. On this line a joint passenger/freight operation exists between DCTA and DGNO. These organizations are responsible for oversight of their agreements to ensure that all train movements are compatible.

# 15.2 Highway Grade Crossing Management Programs

First Transit is responsible for the maintenance of grade crossings and the rail system right of way. On-board train personnel will prepare written reports to the First Transit Transportation Manager containing information on near-miss related events with grade crossing warning devices by motorists and pedestrians. These reports will be forwarded to DCTA's Manager of Transit Operations.

# 15.3 Trespassing and Intrusion Programs

All personnel performing duties on the DCTA corridor will report trespassers to the First Transit train dispatcher, who if necessary, will contact the Denton County Sheriff's Office or other appropriate organization.

# 16. ENVIRONMENTAL MANAGEMENT PROGRAMS

# 16.1 HAZARDOUS MATERIALS MANAGEMENT

DCTA personnel, facilities and contractors comply with all state and federal regulations for both chemical use and worker safety. Warning signage and all personal protective equipment necessary for the handling and proper use of chemicals is readily available to all personal. Employees are periodically counseled on the proper storage, handling and emergency response procedures associated with hazardous materials. DCTA personnel will perform routine inspections of the Operations and Maintenance Facility to ensure proper procedures and compliance of all applicable regulations.

#### 16.2 HAZARDOUS WASTE MANAGEMENT

The O & M contractor, First Transit will implement a hazardous waste management protocol for this system. Implementation includes the safety and accident prevention training of personnel involved in hazardous waste management; the maintenance of a Safety Data Sheets (SDS) library; and hazardous waste disposal procedures, including record keeping.

All employees whose job duties expose them to hazardous materials will receive initial training and annual refresher training in the identification of hazardous materials, the use of MSDS and the proper handling and disposal of such materials.

#### 16.3 WASTE MINIMIZATION AND POLLUTION PROGRAMS

Should a spill occur within the yard and shop or on the right of way, containment will be the first priority. The O & M contractor, First Transit will have procedures in place to ensure that spills are controlled and removed as expediently as possible.

An emergency response procedure will be in effect which ensures that a spill remediation contractor will be able to respond within two hours of notification. The environmental contractor will provide containment materials for use by O & M maintenance staff until the arrival of their employees.

#### 16.4 ENVIRONMENTAL OUTREACH PROGRAMS

DCTA will periodically examine the environmental management program of the O & M contractor, First Transit to determine where improvements can be made and how to maximize the positive effect that commuter rail use by the general public has on the environment.

#### 17. SECURITY

The Authorities are responsible for the overall system security, excluding the Operations and Maintenance Facility, which is the O & M contractor, First Transit's contractual responsibility. The Denton County Sheriff's Department provides DCTA with the primary right-of-way, stations, and on-train security through periodic patrolling. They are assisted when necessary by other local police agencies. A specialized training program will be provided by First Transit to familiarize them with DCTA activities, maintenance facilities and equipment safety and emergency features. Specific response procedures are detailed in the Operation and Maintenance Plan, which is available for reference at the Operations and Maintenance Facility located in Lewisville, Texas.

#### 18. HAZARD MANAGEMENT PROCESS

The Hazard Identification/Resolution process provides the basis for the System Safety Program Plan. The Hazard Identification/Resolution process is a mechanism, accessible to all levels of the organization, by which hazards are identified, analyzed for potential impact on the operating system, and resolved in a manner acceptable to general management.

A structured process is used to assess the risk of each identified hazard including both severity and probability of occurrence. A hazard resolution process consists of

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three primary components: hazard identification; hazard categorization; and hazard resolution.

The hazard identification process requires methods such as Preliminary Hazard Analysis (PHA) and Operating Hazard Analysis (OHA), as well as direct input from field personnel on situations and designs that could cause accidents and injuries. The PHA is conducted by identifying failures and conditions that can occur in each subsystem and at the points of interface between subsystems. A list of certifiable system elements is created in order to identify the systems and subsystems to be analyzed. The PHA also includes a prediction of the logical consequences of a critical failure. The designer/suppliers of these elements are usually required to provide PHA information as a contract deliverable.

The OHA identifies hazards and vulnerabilities associated with the operation and maintenance of the system. This analysis is used to identify hazards that are expected to arise during normal operation and maintenance of the system.

The basic elements of analyzing and assessing the degree of hazards identified through the above processes are provided by the Hazard Severity and Hazard Probability ratings. The tables below indicate the codes assigned to each level of hazard severity and hazard probability.

Hazard Severity: a subjective measure of the worst credible mishap resulting from personnel error, environmental conditions, design inadequacies, and/or procedural efficiencies for system, subsystem, or component failure or malfunction.

# **Hazard Severity Table**

	Hazard Severity Classifications			
Severity Classification		Potential Consequence		
1	Catastrophic	Threat of death or multiple severe injuries, system loss, severe environmental damage or large financial cost		
2	Critical	Threat of severe injury, severe occupational illness, major system or environmental damage		
3	Marginal	Threat of minor injury, minor occupational illness or minor system or environmental damage		
4	Negligible	Threat of less than minor injury, occupational illness or system or environmental damage		

Hazard Probability: the probability that a specific hazard will occur during the planned life expectancy of the system element, subsystem or component:

#### **Hazard Probability Table**

		Hazard Probability Classifications	
Probability Classification		Likelihood of Occurrence	
A	Frequent	Likely to be experienced continuously	
В	Probable	Likely to be experienced occasionally	
С	Occasional	Likely to be experienced infrequently	
D	Remote	Likely to be experienced on only rare occasions	
E	Improbable So unlikely, it can be assumed it will not occur		

#### **Hazard Assessment Table**

Hazard Assessment Table					
Probability	Severity				
	1 Catastrophic	2 Critical	3 Marginal	4 Negligible	
A Frequent	1A	2A	3A	4A	
B Probable	18	2B	3B	4B	
C Occasional	1C	2C	3C	4C	
D Remote	1D	2D	3D	4D	
E Improbable	1E	2E	3E	4E	

#### **Hazard Response Priority Table**

Hazard Assessment Classification	Hazard Priority
1A, 1B, 1C, 2A, 2B, 3A	Unacceptable risk – corrective action must be taken
1D, 2C, 2D, 3B, 3C	Undesirable risk -executive level review required
1E, 2E, 3D, 3E, 4A, 4B	Acceptable risk – however, appropriate management review required and mitigation plans developed and implemented as determined
4C, 4D, 4E	Acceptable risk – no additional review required

After the hazards have been identified, categorized, and evaluated, a plan is developed for resolution/mitigation. This plan is based on an assessment of the risk associated with each hazard and the method of mitigation. Hazards may be mitigated by either: design for minimum risk; use of safety devices; use of warning devices; or through procedures and training

To ensure that hazards are properly resolved, the hazards and proposed resolutions will be presented to the System Safety Committee for approval. A Safety Certification

Authorization will be prepared by the committee. The certification will include a description of the project, and require the sign-off on the hazard logs generated from the hazard resolution process described above by DCTA's AVP Rail Operations and the O & M contractor, First Transit's General Manager.

# 19. ACCIDENT/INCIDENT REPORTING AND INVESTIGATION

#### 19.1 Criteria and Procedures

Every accident or incident occurring on or about the property used in the operation and maintenance of the commuter rail system shall be reported to DCTA's AVP Rail Operations under the following guidelines:

- A verbal notification by personnel at the scene of the incident shall be submitted to DCTA's Manager of Rail Operations immediately following each incident of any magnitude on the corridor.
- A preliminary written report shall be submitted to DCTA Manager of Rail Operations within two business days of the occurrence, e.g., train crew statements and train incident reports.
- A complete report shall be submitted to DCTA within five business days. DCTA's
  Manager of Rail Operations, as appropriate in cases involving the National
  Transportation Safety Board (NTSB), FRA, or other outside investigative or
  regulatory agencies, may modify this provision.

Accidents/incidents being reported under the guidelines listed above include, but are not limited to: derailments, grade crossing accidents, passenger injuries, trespasser injuries, employee injuries, and mainline restrictions of any nature that are anticipated to last longer than 20 minutes and any other incident that would require federal or state notification.

#### 19.2 Internal and External Notifications

DCTA and First Transit are responsible for preparing and submitting written accident/incident/fire reports required by their respective safety organizations. Findings, conclusions, and recommendations from these reports need to be documented and a policy for type, format, distribution and retention will be implemented by DCTA.

DCTA, with input from First Transit, will prepare reports as necessary for external agencies, such as NTSB, FRA, state and local regulatory agencies, and governing boards.

#### 19.3 Cause Analysis

Upon notification of an accident and if circumstances warrant, the Committee Chairperson shall convene the Safety Committee, which shall review accident investigation reports as necessary.

Results of an investigation will include:

- Determination of the cause
- Determination of corrective actions required to eliminate the cause and prevent a recurrence of the accident
- Determine of the necessity for the adoption of new safety practices or rules and/or making changes to the existing rules
- Generation of reports for external notification meeting the requirements of Federal and State regulations.

#### 19.4 Reporting and Follow-Up Documentation

The O & M contractor, First Transit and its managers are responsible to ensure that corrective actions are taken to prevent recurrence of accidents or incidents. The corrective actions taken to ensure future safety will be reported to the Safety Committee Chairperson.

All necessary information pertaining to a specific accident or incident will be contained in a standard format and stored at the Operations and Maintenance Facility (OMF).

#### 20. SAFETY DATA ACQUISITION/ANALYSIS

Safety data relative to system operation shall be collected by the various departments of both DCTA and the O & M contractor, First Transit and distributed to appropriate staff members of the Safety Committee. This data will include information on various operating characteristics of the system relative to safety. The Safety Committee will use this data to determine trends and patterns in system operation and can be used as part of an operating hazards resolution process to identify hazards before they lead to incidents/accidents. Furthermore, safety information acquired through industry committees, workshops and conferences is communicated throughout the organization to address problems and issues that have arisen within the industry.

DCTA and O & M contractor, First Transit employees will be encouraged to participate in industry committees, workshops, and conferences in this regard to further enhance the value of the data acquisition and analysis.

#### 21. LOSS PREVENTION AND CONTROL

#### 21.1 Fire Safety Analysis

DCTA shall maintain a fire safety analysis as required under 49 CFR parts 238.103 (Fire Safety). The analysis document will be maintained at the O & M Facility.

The analysis document shall address four essential elements:

- A means to identify and prioritize safety risks.
- . An action plan that, over time, allocates resources to reduce the most severe risks,
- A means to monitor, measure and document the effectiveness of the action plan.
- Periodic adjustments to the action plan.

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# 21.2 Casualty Management Review

DCTA will monitor costs incurred due to accidents, third party claims, employee injury related medical costs, or litigation, and develop lost control initiatives based on analysis of the aforementioned costs.

# 22. SYSTEM CHANGE MANAGEMENT

DCTA relied on consultant services for design and implementation of modifications to the physical plant, rolling stock, and the maintenance facility. The approval process during design was also dependent on the expertise of the First Transit of the service. DCTA, in conjunction with the O & M contractor, First Transit, will implement a configuration management process that will include: procedures for the granting authority to make configuration changes; the process for incorporating these changes into the necessary documentation; and the process for ensuring that all departments impacted by the changes, including the Safety Department, are made aware of them.

#### RIGHT OF WAY MODIFICATION

DCTA relies on consultant services and O & M contractor, First Transit for design and review responsibility for modifications to the signal system and various projects along the right of way. DCTA's Safety Committee reviews and approves recommendations before any field implementation.

# PASSENGER RAIL EQUIPMENT/FACILITY MODIFICATIONS

DCTA is responsible for retaining equipment design and architectural consultants who play an integral role in the procurement of equipment and planning of any facility modifications. A project committee is established for each proposed project that includes the Manager of Transit Operations, as well as the contractors' maintenance and operations managers. These contract employees advise the Manager of Transit Operations on day-to-day impacts of the project, and recommend approval or changes as appropriate.

The Manager of Transit Operations is delegated with the responsibility of ensuring that any hazards associated with system modifications or expansions of any kind are incorporated into a hazards resolution process.

# 23. INTERNAL SAFETY MANAGEMENT ASSESSMENT

The Internal Safety Management Assessment Process is a formal process through which all safety elements in the railroad environment are evaluated on a regular basis to determine that they are operating as intended, and that they are effective. The process applies to all processes and procedures involved in the rail operations on the DCTA system.

The assessment process provides a means by which the DCTA verifies that all essential parties involved in railroad operations have developed rules, policies and plans in accordance with the DCTA SSPP. It is DCTA's intent to annually review these SSPP elements in order to identify SSPP strengths as well as deficiencies in order to revise the SSPP to be a continually relevant document.

It is the responsibility of the DCTA Manager of Rail Operations, to ensure that DCTA and the O & M contractor, First Transit carry out the following activities:

- Order cessation of unsafe activities or operations that are determined to be presenting an immediate or imminent hazard within the commuter rail system.
- Conduct unannounced inspections aimed at identifying and eliminating unsafe practices, operations or conditions.
- Conduct efficiency testing of train crews as specified in Program for Operational Tests and Inspections
- Systematically review train crews' knowledge of rules and procedures and instruct the crew as deemed necessary to assure thorough familiarity.
- Ensure that training is conducted for all personnel including subcontractors.
- · Review all training plans for the inclusion of safety for all offices.
- Investigate all accidents and fires, as well as repetitive unsafe actions.
- Review procedures and recommend changes or modifications.
- Execute appropriate disciplinary action for employees for violation of operating and safety rules.
- Define tasks for other DCTA and O & M contractor, First Transit that will result in reducing the number of hazards.
- Identify the need for new or revised rules and procedures. Develop and implement rules and procedures as appropriate.
- Conduct hazard identification and assessment.
- Provide safety reporting to FRA, OSHA and other agencies as required or appropriate.
- Acquire Safety data from FRA and OSHA, analyzing trends for application to DCTA safety programs.
- Qualify and examine employees on applicable rules and procedures.

An APTA triennial safety audit of the SSPP will be performed to provide a mechanism for documenting the fact that the activities identified above are being performed, and that all key organizational elements identified with system safety responsibilities are performing as required to ensure the safety of the system.

The internal audits shall:

- Be planned, conducted, and maintained by DCTA or their designee;
- Verify implementation and compliance with all aspects of the SSPP and to determine the effectiveness of the plan;
- Be documented and reviewed by management personnel responsible for the audited area;
- Include a "follow-up" process, including a re-audit of deficient or outdated areas, to ensure compliance.

Special audits may be performed on areas affecting quality and safety when major changes are made in the SSPP, or if an area or activity is suspected to be deficient and/or ineffective.

Results, recommendations, and all follow-up actions of all SSPP audits shall be forwarded to the System Safety Committee for review.

System security audits will be performed and evaluated to ensure training to the Denton County Sheriff's Department remains relevant and will focus on discovering more effective ways of keeping DCTA's passengers, employees, facilities and equipment safe.

# **END SECTION**

# 24. Appendix A: A-train Corridor Emergency Responders

Адепсу	Title	Contact	Phone / Email
Carrollton Fire	Assistant Chief	Mark Haseloff	972-466-3208 / mark.haseloff@cityofcarrollton.com
Carrollton Police	Sergeant	Ron McCraw	972-466-4314 / ron.mccraw@cityofcarrollton.com
City of Denton OEM	Emergency Management Coordinator	Michael Penaluna	940-349-8836 / michael.penaluna@cityofendton.com
Carinth Palice	Chief of Police	Debra Walthall	940-498-2017 / dwalthall@cityofcorinth.com
DART	Emergency Preparedness Manager	Jill Shaw	214-749-5961 / jshaw@dart.org
Denton County Emergency Services	Director	Jody Gonzalex	940-349-2840 / jody.gonzalex@dentoncounty.org
Denton County Sheriff	Assistant Chief Deputy	Steve Macsas	940-349-1622 / steve.macsas@dentoncounty.com
Denton County Sheriff	Deputy	Robert Lemley	940-597-0182 / robert.lemley@dentoncounty.com
Denton Fire	Deputy Fire Chief	Kenneth Hedges	940-349-8832 / kenneth.hedges@cityofdenton.com
Denton Police	Deputy Chief	Roger White	940-349-8939 / roger.white@cityofdenton.com
Hickory Creek Police	Chief of Police	Carey Dunn	940-497-3520 / carey.dunn@hickorycreek-tx.gov
Highland Village Fire	Fire Chief	Brad Goudie	972-317-0890 / bgoudie@highlandvillage.org
lighland Village Police	Chief of Police	Doug Reim	972-317-5558 / dreim@highlandvillage.org

Agency	<u>Title</u>	Contact	Phone / Email
Lake Dallas Police	Lieutenant	Vikki Chandler	940-497-2228 / vchandler@lakedallaspd.org
City of Lewisville OEM	Emergency Management Specialist	Matt LaMunion	972-219-5089 / mlamunion@cityoflewisville.com
Lewisville Police	Assistant Chief	Kevin Deaver	972-219-3685 / kdeaver@cityoflewisville.com
Lewisville Fire	Assistant Chief	Mark McNeal	972-219-3563 / mmcneal@cityoflewisville.com
Corinth Fire	Fire Chief	Curtis Birt	940-498-2017 / cbirt@cityofcorinth.com
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